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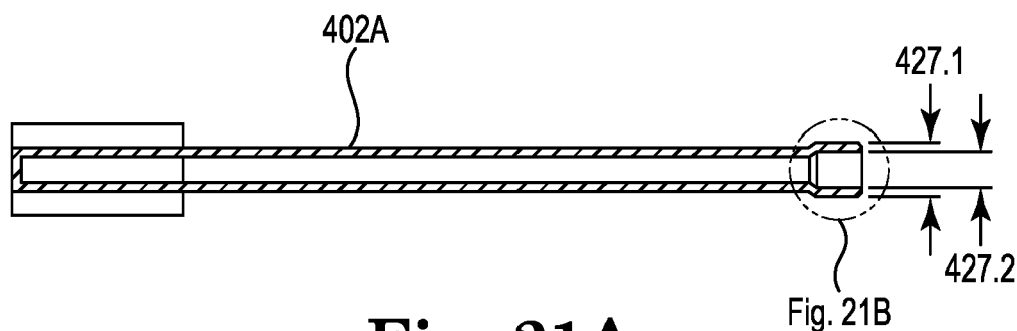
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(54) **TOWERS FOR SUBSTRATE CARRIERS**

(57) A diffuser tower assembly having a diffuser with a flared end and a fitting with an offset portion and nipple sized for the flared end. The assembly may be configured for providing low coverage purging. Diffuser tower assemblies may be in the form of a kit for retrofitting existing front opening wafer containers. The inlet fitting may include structure that enhances purge characteristics near the base of the porous media diffuser for enhanced

sweeping of the floor of the substrate container. Embodiments of the disclosure generate an uneven flow distribution that provides a non-uniform flow distribution at the opening. In an embodiment, where the opening is in a substantially vertical orientation, the non-uniform flow distribution is tailored to deliver a greater flow rate to the bottom half of the opening than to the top of the opening.



**Fig. 21A**

**Fig. 21B**



## EUROPEAN SEARCH REPORT

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			H01L
The present search report has been drawn up for all claims			
Place of search <b>The Hague</b>		Date of completion of the search <b>28 August 2023</b>	Examiner <b>Claessen, Michiel</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document	

# **ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.**

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